1: Petrullo E-3 (1933-34) 1939 SS19 Yaruro SS19

136 Bats are plentiful, but they tend to be most abundant in the forests and hills close to the Orinoco. Armies of them fly nightly out of the caves of Guiana to feed on the fruit of the forests in the plains. One evening while crossing back from Guiana to the llanos we saw a stream of bats flying across the river. They seemed to come from a cave about 2 miles away. Though we watched them flying overhead for about half an hour, there did not seem to be any end to them.

174 Formerly the llanos were peopled by a number of tribes who have since disappeared, leaving behind them practically no knowledge of their societies. Only the Yaruros and the Guahibos inhabiting the Meta region have survived to this day. The Tamanachi, the Guamos, the Otomacos, which are best but meagerly known, have died or been killed off in recent years. I saw the last Otomaco survivors, an old woman and a boy of five, who had been saved from a reputed massacre. The Achaguas seem to have disappeared in recent years also.

177 What has happened to these people can be easily understood when it is considered that during the past 25 years the worldwide unrest has driven adventurers to many corners of the earth, and these people have been exposed to the marauding "revolutionary" bands and to the equally destructive cupidity of the crocodile hunter and the rancher.

161 There are 150 Yaruros left in the region of the Capanaparo and
101 on an island at the mouth of that river called the Linda Bara. It is claimed that on the Sinaruco there are other bands but no contact was made with them. Formerly the Yaruros occupied a large territory and perhaps roamed the plains, as well as the rivers, but since the land has been taken up by the ranchers they have been forced to the river banks.

136 The animals of greatest interest to the Yaruros are: jaguar, puma, wild pigs, capibara (the chiguire), armadillo, snakes, jivaro stork, vultures, manatee, tonino, crocodiles, iguana.

137 Plant life has great importance as a source of food, usable wood,
222 medicines, and narcotics. The moriche and macanilla palms supply the Yaruros with fibers and bow wood. The chigua supplies him with flour; the changuango and barbaco with edible roots.

101 The Yaruros call themselves "Pumeh." In the literature they are referred to as "Saururi" (Gumilla), "Zavuri" (Gilii), and more recently as Jaruros, Sayuros, etc. According to my informants Yaruro or Jaruro, is a Guahibo word by which they are known to that people. The Guahibos are known to the Yaruros as "Tciricoa," "people of the forest." The word Pumeh has no exact translatable meaning. The closest equivalent is the Spanish "gente." When a Yaruro uses it he implies "the people," "the chosen people." Only the Yaruros are Pumeh, but the term occasionally includes other tribes. All non-

1: Petrullo E-3 (1933-34) 1939 SS19 Yaruro SS19

thought to be related to the race of mankind. On the other hand, the manatee is hunted occasionally. Birds are hunted but seldom, but the meat of the iguana is prized. This animal is not found in great quantities, however, in the open plains.

The vegetable diet is somewhat more plentiful and varied. There are no restrictions or taboos on what can be eaten. In the dry season it is the potato-like changuango, which is gathered by the women and which is to be seen broiling over the fires at all times, and which is the only food which the Yaruros are able to keep for a few days by burying it in the sand. In the rainy season it is the chigua seed and the barbaco which form the basic foods. The following list includes most of the foods eaten by the Yaruros:

DRY SEASON

Eggs.—Terracai (small water turtle) (mostly in February), turtle (March, April), galapago (tortoise—December), crocodile (cayman—February), babu (December).

Meats.—Terracai, turtle, galapago, crocodile (babu), deer, chiguire (capibara), birds, iguana.

Vegetables.—Changuango (root found in the savanna), barbaco (root found in the forest, mostly in May), guapo (a root found in the forest), wild yam (found in the savanna and the forests), fruit of the macanilla palm, honey, hearts of palm (in April).

DRY AND RAINY SEASON

Fish.—(Local Spanish names) tapuara, caribe, toporo, tachiama, palumeta, pavon, cajani, temblador (electric eel).

RAINY SEASON

Meats.—Terracai, turtle, galapago, crocodile (babu), deer, chiguire, birds, iguana.

Vegetables.—Fruit of the moriche, chigua, barbaco.

PROPERTY

The Yaruros do not have much personal property. Nevertheless, what each person possesses is respected scrupulously. This attitude is especially in evidence when, for instance, a visitor attempts to purchase such a thing as a pot. In my case I was forced to ask the men. In spite of any price that I might offer they never allowed themselves to give any kind of an answer to my offer. Instead they offered the explanation that the pots were the property of the women and, therefore, they had to be asked if they wished to sell them. My own property I left in camp often without anyone to watch over it, but never did I miss even a sheet of paper.

1f Petrullo E-3 (1933-34) 1939 SS19 Yaruro SS19

iron hoe, which is also made by the Yaruro out of any heavy scrap of iron that they may gather. Sometimes they will work for the ranchers and with their earnings purchase this type of hoe from a trader. However, such a digging tool is quite a luxury and sharpened sticks are more common.

MORTARS AND PESTLES.—During the rainy season, the Yaruros gather chigua, a seed, which they dry and pound into flour. Mortars of wood shaped as shown in figure 20, *a*, *b*, are used and the pestle is any ordinary hard stick.

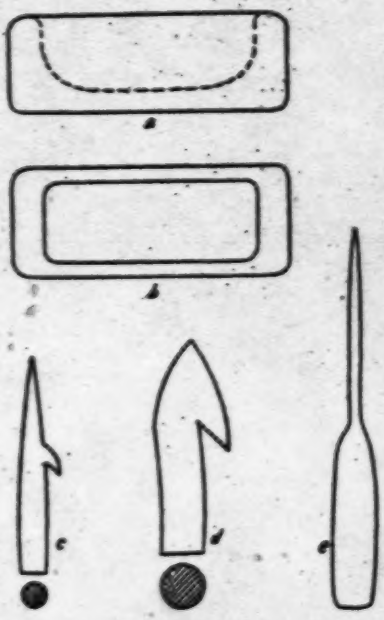

FIGURE 20.—*a*, *b*, Wooden mortar. *c*, Bone or iron point used for hunting chiguire. *d*, Hook used for manatee. *e*, Cooking paddle.

COOKING LADLES.—These are small wooden paddles used in cooking, especially when meat is boiling in a pot (fig. 20, *e*).

HAMMOCKS.—The Yaruros prefer to sleep on the sands, especially during the dry season. The men make hammocks, however, small ones generally used by children as cradles, and by the women shamans when they sing, during the day. During the rainy season they may employ them for sleeping.

The fiber employed to make the hammock string comes from the moriche leaf. The string may be very fine, of course, depending on the interest of the maker. It is made by the men. To weave the hammock a loom is made of two poles thrust into the sand to which are fastened two crosspieces at both the top and bottom. The string is then wound around these crosspieces. The weaver employs a knotter's netting technique. When the entire hammock has been woven the weaving is held in place by another string thrust through one of the woven rows.

ROPE.—The fiber mostly employed by the Yaruros is taken from the leaf of the moriche and the macanilla. The inner cortex of the leaf is stripped off and dried and then is taken apart strand by strand. These long fibers are then moistened and twisted together in two's and three's into a string by rolling them on the thigh with the palm of the hand. A stronger string is made in the same way and used for making hammocks. The bow strings are made from the fiber of the macanilla.

1: Petrullo E-3 (1933-34) 1939 SS19 Yaruro SS19

181 177 invention offers a perfect refuge, even though it is only a philosophical one.

Mechanical aids to the shaman, in addition to his own psychological make-up, are: music and dance; tobacco, which he consumes in great quantities during his performance; tcuipah, a root with narcotic properties; caroto, which is a fermented or unfermented mixture of crushed maize and water, or manioc and water, and when obtainable, white rum. The extent to which these stimulants are used can be illustrated by the observations which are made in the course of one all-night performance: The shaman consumed 42 cigarettes which I offered him, about 100 cigars, which consisted of several strips of tobacco leaf wrapped in a thick green leaf obtained from one of the trees along the bank, about 6 inches of the tcuipah root, and about 2 quarts of the fermented maize-and-water mixture. Since these narcotics and stimulants were taken hurriedlly and in great quantities, it must have had a terrific physiological effect upon him. For instance, every cigarette and cigar was smoked completely through in 10 seconds. Each musical stanza lasted from about 10 to 15 seconds. He sang it first and then it was repeated by his people. It was during this repetition of his song that the shaman inhaled as much of the tobacco smoke as possible and then exhaled it just before commencing a new stanza.

791 276 273 [132] 533 276

In contrast with the rather violent shamanistic performance of the male shaman, the women do not seem to depend very much on narcotics. During the day the men are not permitted to sing or whistle, but the women may lie in their hammocks and sing. They may take small quantities of all of these narcotics, but as far as my observation went I never saw any of them consume any great quantity.

791 276

The spiritual world of the shaman is quite different from the everyday realistic world. A comparison of the carvings on the gourd rattles with the realistic carvings of the asabache made by anyone greatly demonstrates this. In the latter form of art expression, animals, birds, and scenes are copied with great accuracy and skill. It is, therefore, reasonable to suppose that if the shaman were to attempt the realistic representation of the spirit world he could do so, but he has chosen to portray the various gods and spirits almost symbolically. Kuma and Hatchawa were always represented holding up their hands. It is this position which is read into the western skies whenever at sunset there occurs a phenomenon described above. The rays of light emanating from the horizon represent the fingers of the hands of the gods.

531 776 787

The form of the dance has been described. It starts off as a simple walk around a pole and it may become a fast run in the evening,

535 791

133 As one goes inland from the coast and westward through Yaruro territory, the land slowly rises so that the town of San Fernando de Apure is about 100 feet above sea level; Palmarito de Guachara, about 60 miles southwest, is just 145 feet; and the Cinaruco river about 100 miles SSW is about 190-200 feet. From the middle Cinaruco, the site of the writer's field work, to the sea, the average slope is 0.007% or 4 ½ inches/mile, but the slope increases gradually as one goes west till nearly 200 miles to the west, the plains abut on the Andes where, within a space of about 50 miles, the land rises from about 650 feet to over 12,000.

132 The slope of the land is paralleled by a gradual increase in total annual rainfall and length of rainy season, respectively averaging for the region as a whole about 1600 mm (63") annually,[1] and about 8 months of heavy rains with 2-3 transitional months of unsettled weather with considerable rain. The slope and climatic gradations are paralleled, furthermore, by an 134 orderly series of soil and vegetation types. As one moves steadily nearer the mountains, the soils change from muds, as at San Fernando, to muddy and sandy loams at Guachara, to sands and sandy loams in the central Cinaruco, and increasingly to sands and pebbly areas. These micro-ecological [184] differences appear to determine micro-cultural differences among various groups of Yaruro as one goes westwards, for example in the specific content of the cosmology. Space only permits us, here, to deal with the Cinaruco area.

133 The dip of the strata, hence drainage, is from West to East. The slope of the dip is so small, as we have noted, that at the first sizable rains, the flow exceeds the carrying capacity of the stream beds and flooding occurs. Thus, during the rainy season from May through September, [132] during which from 85-90% of the annual rain occurs, there is a constant tendency to flood, while during the driest months from December through March, not more than a total of 3 inches falls, and the rivers and landscape dry up often totally, presenting desert-like conditions. Because the topography of the central Cinaruco area is not level in large areas, and even in the flat parts, is raised above the level of the streams, flooding occurs more because of accumulated rain in low spots where it cannot drain than from overflow from streams. The streams themselves are swollen and in places overflow their banks for short distances before they are enclosed by the higher terrain. The west-east dip of the land an the east-west prevailing winds combine to make surface land forms, such as sand dunes and creeks, called *caños* (Y. *doro*) run east and west also.

133 In the central Cinaruco area, the creeks on the north side of the river are contained in a sort of basin formed by a row of dunes, perhaps as high ● 137 as 100 feet above the neighboring savanas, almost 300 feet above sea level, running east and west for many miles at a distance of 3-5 miles from the Cinaruco. On the south side of such "ranges" of dunes, a creek like the Totúdoro is likely to be found. On its right bank, sometimes at some [134] distance back from the normal high water mark, it is contained by the edge of the flat, sandy, coarse-grassed savana, which is marked by a continuous

1 [for footnote see category 116, p. 42 -- Analyst]

narrow band of soft, red-brown, heavy pebbles, sometimes agglomerated into chunks as large as a man's head. These, the only stones of this area, are entirely absent to the north-east and are technologically useless. Between these bands, which appear to represent flood levels or banks of older streams into which the present beds have been incised, and the streams themselves, low-lying areas are found which are soggy to a depth of a couple of inches above a clayey-sandy hardpan, and are covered with a sleezy layer of organic remains. Grasses appear slightly less barren here than in the areas beyond the pebble banks, the savanas proper. 133 134 [137]

The savanas run east-west for miles and may be one or more miles wide, broken here and there by either strips of dunes or patches of woods, called *montes* (Y. *hôi*), growing in somewhat saucered hollows which may once have been parts of stream beds. On the upper level savanas (Y.*ciri*), the soil is largely sandy, with occasional scatterings of pebbles at the juncture with the lower savana level 12 to 15 feet below it. Grasses are course, tough, long-rooted, and sparse, giving a barren, yellow appearance even in mid-rainy season. Only a few scrubby trees are seen on the open moors, mostly in wetter spots. These sandy savanas have long since been leached of practically all mineral content, as soil tests show.[2] The savanas constantly tend to lose their finer particles of soils, which are deposited near the streams where the latter have cut down a few feet into the surface of the savana. Thick and rich soil layers are, thus created. It is in such layers that soils mechanically more suitable for horticulture combine with a water supply which suffices not only in the wet season, but also provides a dry-season water table accessible to long-rooted flora. This combination fosters the growth of gallery forests, here, which constantly add humus to the very limited areas of better soils provided in this habitat. The width of these layers depends on the depth of the stream's incision and the amount of flow as well as on the presence and relative distance of the dunes and the high and low savanas from the streams, and on the slope and width of the low savana next to the stream. Maximum width of these layers occurs where the streams are more incised and the slope from the higher savana to the streams is a steady descent, so that drainage occurs without flooding and waterlogging, while the dry-season water-table is not too far below. Under any other conditions, these places are narrow, or may almost disappear. Thus, the mouths of *caños* have narrow or no strips of gallery forest since the level of the savana is little above that of the stream, and little soil accumulates at the same time that flooding is heavy. On the upper reaches of streams, *caños* are little incised, the slope from the high savana is insufficient to have deposited much soil, and the forest again disappears. Thus only the median stretches of streams are well-forested and it is only in these areas that horticultural soils are available. Only the *montes*, those depressions in the savana surfaces, which, though above permanent water, nevertheless are nearer the water table than the surrounding savana, provide other suitable, if dry, areas for planting. Here too are found tall tropical hardwood forests which somewhat enrich their own soils by a very thin layer of humus. 137 134 [133]

[2] [for footnote see category 116, p. 42--Analyst]

area is only such in reference to the presence of a given technology. The presence of such a technology is not guaranteed in any particular culture by any historical, evolutionary, geographical, or ecological necessity. Its presence may entail a particular historical explanation or a general evolutionary one. In any case, its absence entails the absence of the use of certain resources whose presence we can observe only in retrospect. 311

Other resource areas besides those utilized because of the presence of horticulture among the Yaruro become available by their possession of hunting, gathering, and fishing technologies, as well as recently acquired animal husbandry in the form of pig-herding. Hunter animals include deer, armadillo, capybara, paca, peccary (?), iguana, and a number of birds (see Table II, p. 4)[1]. These are variously distributed spatially according to the specific ecological niches for which they are adapted. Thus deer are apparently usually found dispersed in the somewhat damper, low-lying savanas where grass is greener and water more available away from the scene of human activity. Armadillo are found distributed throughout the savana. Other species, however, such as the capybara, live near the edge of permanent waters, mainly the rivers. Alligators also live only in the rivers. The faunal carrying capacity of the savanas appears to be quite low in the Cinaruco llanos since foraging foods for larger game animals are sparse. It is important to note that not only is the overall carrying capacity governed by the minimum average food supply of the savanas in the florally more restricted dry season,[1] but the distribution of animals varies considerably from the wet to the dry season. In the latter, animals tend to cluster nearer the rivers or the widely dispersed water holes. Consequently, the locus of hunting must also shift seasonally (see Maps)[2]. Savana hunting techniques are neccessarily different from those used in procuring food in the rivers, whether hunting alligators or capybara, or, of course, fishing. There is some seasonal variation in the locus of fishing, too, although this is much less marked on the Cinaruco than on the freely-flooding streams of the flatter, more north-easterly savanas of the Apure llanos. In the rainy season, fish move up the larger streams into somewhat shallower waters where more plant and insect food is available to them. However, they are apparently unable to move up smaller streams which often have rapids-like stretches interrupting their course. Thus fishing in the rainy seasons is directed towards the larger creeks and away from the smaller creeks and the river itself, where the water has become too deep for successful fishing since the fish are scarcer and more difficult to see in the deep, swift currents of winter. In respect to animal husbandry, recently introduced pigs are pastured anywhere in the savanas but preferably next to the village or quite a distance from it, in either case far from the nearest gardens (Sp. *conuco*, Y. *tadó*), an effort which is rarely successful, since the pigs, in their wisdom, are among the main predators on the garden crops. Gathering may be carried out in the dry or the wet savana depending upon the plant food to be gathered, or it may be carried out near the creeks especially for the fruit of the moriche palm. The rivers do not appear to be used in gathering. 224 137 [221] 226 133 231 [241] 222

[1] [See pp. 35-37, category 116 --Analyst]
[2] [See pp. 40-41, category 102 --Analyst]
[17] [for footnote, see p. 42, category 116 --Analyst]

desert-like conditions in the other, temperature, sun, soil, and water-table conditions are such that plants will grow all year round, supplying a steady flow of vegetable foods to the people. The change of the water level in the rivers and in the water-table and the sharp increases and decreases of rain strongly affect the patterns of animal and plant life in the Yaruro environment. Annual cyclical variations in wind, humidity, and temperature are also quite marked. Plants and most especially animals, experience a kind of seasonal pulsation. As the rivers fill during the rainy season, the larger animals, such as the cayman, alligator, manati, and dugong, move upstream to somewhat shallower waters, where their food supply is easier of access. Fish also move upstream and even up small brooks, where this is possible. If the savannas flood, many fish swim out into the savannas where numerous insects and other foods are now to be found. The insects themselves multiply and are distributed farther and farther back from the rivers as the rains progress and the savanna floods widen. Meanwhile, foraging animals move farther from the rivers and ponds, and range over greater distances as the rains and the elevated water-tables foster greater plant food resources. Insects in part follow the animals, in part the vegetation as it wakens to winter life in the interfluves. As the dry season begins to return, the reverse process takes place, and all life concentrates nearer and nearer the permanent waters such as the big rivers and some lakes, or at points where the land surface is near enough the permanent water-table to maintain some vegetation, notably the gallery forests and the woodlots, called *montes* in Spanish. Thus one may ideally describe a summer and a winter organization of the habitat. The incidence of resources varies accordingly, and consequently so do the technological activities and tasks to be done. In the dry season, there is a marked increase of gathering, particularly of roots and seeds which appear to store starches for dry season use in the wet season, whereas fruits appear mainly in the rainy season. Hunting increases in the dry season when animals are more highly concentrated in and near the rivers and tributary brooks and streams. Fishing also increases in the dry season as the waters become shallower, less grass-choked, and no longer laden with muds from upstream erosion which makes it impossible to see the fish. Garden production appears to decrease in summer as the dry season precludes growing some crops, such as pineapples, altogether, and reduces the possibility of growing sugar cane and corn.

Despite this marked seasonality, the habitat conditions of both seasons resemble each other in certain formal respects vital to our argument.[10] First, at any given moment of either season, from the point of view of work organization, the resources are what we may call dispersive. Thus, in mid-rainy season, swiddens are to be found dispersed along the streams and brooks flowing into the rivers and these adits are distributed irregularly over the land within a distance of 4—5 miles of the river. Even low slip-off slopes of the river may be used for growing sugar cane in the wet season, though they are too dry in the dry season. Game, such as tortoise, armadillo, deer, birds, and occasional other animals, are to be found throughout the savannas and about the river banks. Fish are found in most streams and in the rivers including those which have no useful banks for horticulture.

[10] Cf. Leeds, 1961, for further details and maps of the seasonal resource locations.

4: Leeds E-5 (1958) 1960 SS19 Yaruro SS19

[P. 1]

Antropológica

SOCIEDAD DE CIENCIAS NATURALES LA SALLE
Ap. 681 — Caracas - Venezuela

Número 9 31 Enero 1960

THE IDEOLOGY OF THE YARURO INDIANS IN RELATION TO SOCIO-ECONOMIC ORGANIZATION

Anthony LEEDS

121

It is the purpose of this paper to show the correspondence between the principles of socio-economic organization of the Yaruro Indians and their ideology and to isolate some dimensions of ideology which may be used for comparative purposes. It is hoped that by further isolation of such categories it will eventually become possible to compare the structure and content of widely different ideologies, as we today are able to compare kinship systems, so that we may be able to recognize synchronic regularities of a functional order and diachronic regularities of an evolutionary sort. Yaruro religious and philosophical beliefs are reduced to a series of postulates or axioms about the nature of the universe and man in an analysis somewhat like Kluckhohn's study of Navaho philosophy and Opler's of Apache themes. (1). No Yaruro would be able to express the axioms nor see them in the logical series as presented here, yet each would recognize them, when couched in the phrasings of his own language, as referring to his particular *Weltanschauung*. The postulates are derived from direct statements by informants about the cosmos or about human living, from other verbal materials such as discussions of disease and social organization, and, more occasionally, from observed behavior. The generalized titles introducing each of the summarized postulates appearing at the end of the paper comprise the dimensions, here inductively arrived at, which may serve for cross-cultural analysis.

101

The Yaruro Indians have been living in the savannas or llanos of Southern Venezuela for an unknown number of centuaries. They have developed a socio-economic life well-articulated to the geographical conditions of life.

[131]

The gross geographical characteristics of the alternately desert-like and flood-covered llanos cause all the best economic resources to be concentrated

139
137

(1) Kluckhohn (1949); Opler (1945).

4: Leeds E-5 (1958) 1960 SS19 Yaruro SS19

133
137 along the west-to-east flowing rivers in ribbons some kilometers wide. Most significant fauna and flora of economic use occur in these ribbons. This ecological distribution of resources governs subsistence activities whether they be mainly hunting, fishing, collecting, or horticulture.

241
433 Yaruro subsistence comprises all these activities. (2). Horticulture in the rainy season appears considerably to outweigh all other sources of food together, but in the dry season, hunting, fishing, and collecting perhaps equal or outstrip horticulture. In any case, slash and burn gardening of manioc, corn, plantains, and a number of lesser crops is by far the single most important economic activity. The technology is exceedingly simple in all aspects of
[442] production, the main tools being the machete and digging stick. The most elaborate technology occurs in the conversion of food into edibles and in the manufacture of hammocks, pottery, objects of wood such as canoes, and woven containers of all types.

462 The economic organization displays a sharp division of labor between men's and women's work. Men do all hunting and fishing, make all objects of wood, haul lumber and householding materials, make hammocks, and carry out the heavy labor of gardening. Women do most of the collecting of roots, seeds, and fruits. Since collecting contributes a substantial portion of the food
[222] supply in summer, woman's contribution, here, is of considerable communal importance. Women's work, a continuous activity from dawn to dusk, is, first, the conversion of raw foodstuffs into edibles. Second, women make all pottery, mats and baskets, the manioc squeezers, and much of the cord used to make hammocks. Another important contribution of women is their help in harvesting in the gardens. Men sometimes help the women with the cookery.

[476] Men may work alone, in groups of 2 or 3, or in larger groups on rare occasions. No occasion exists for all men to work at a single task since there is no technological need for it. Women's work groups for collecting or household-
[592] ing are of similar size. Work group alignments are often based on choice or accident but in other instances coresidence and kinship are determinants. The household, however, constitutes the only really necessary cooperative group for production. The mān is a funnel for produce which the woman converts to

114
[122]

(2) The present description applies to the Cinaruco River Yaruro where the major part of the writer's field work, supported by a grant from the Social Science Research Council, was done. The Capanaparo River Yaruro were reported by Petrullo (1939) and Le Besnerais (1948) as being hunters and gatherers, although Le Besnerais observed small horticultural patches which he claimed were diffusions from Venezuelan farmers which had occurred recently. Le Besnerais in 1954 states directly that they were horticulturalists, omitting any mention of possible diffusions from Venezuelans. The passing mention of horticulture by Fissoon (1947) confirms the present writer in his opinion that, although horticulture may be more restricted on the Capanaparo than on the Cinaruco and Cunaviche-Arauca (where the writer also spent several weeks) which are not discussed at all by Petrullo or Le Besnerais, nevertheless, the absence of horticulture is probably not aboriginal with the Yaruro as has been suggested by Kirchhoff (1948, p. 456). Rather the restricted gardening is a result of ecological conditions on the Capanaparo which are less favorable to horticulture than on the neighboring rivers, combined with extremely violent acculturation, including large-scale massacres of natives. The only other possibility, in my opinion, is, that horticulture was introduced by the missionaries in the early part of the
[797 Eighteenth Century, which is certainly the period when the Yaruro first became
177] acquainted with iron tools (cf Lodares, 1922).

/8 cont./

114 174 [177 241 197]

5. This paragraph had been published when we learned of Anthony Leeds' articles (see "infra" IV List...42 and 43). The latter considers that agriculture, which exists among the Yaruro, as we acknowledge further along, was introduced by missionaries at the beginning of the eighteenth century.

descendants of the first inhabitants, hunters and gatherers who invaded South America at the beginning of the Neolithic Age, as Father Cooper suggests, or are they groups of Indians who after diverse vicissitudes have degenerated and adapted their civilization to a new way of life, as Levi-Strauss insists?"

121 Immigrants or not, hunters, fishers, and gatherers who evolved, or agriculturists who regressed, we shall not make a choice here between these alternatives and shall limit ourselves to presenting two observations which, gone into more deeply, will eventually permit opting in favor of one of the theses before us.

[137 241] 1) The tropical savanna inhabited by the Yaruro, as a consequence of the absence of extensive forests, is hardly propitious for primitive agriculture. The latter could, however, be carried out there on a small scale.

114 121 241 The Yaruro, in fact, and contrary to Vicenzo Petrullo's observations, are not only gatherers, fishers, and hunters, but also practice agriculture, in general on land cleared in the forest corridors. Petrullo probably did not observe this aspect of their way of life (6) because he carried out his investigations

6. We made, moreover, the identical error in the course of our first investigations (see "infra" IV List...40).

at the height of the dry season--when the soil /9/ is no longer

/11 cont./
773 out of reach of the waters, having refused to shelter themselves
825 on an elevated knoll as Ijiai ordered them to do. The latter, to punish them, condemned them and all their family to become "monos and araguatos who will eat henceforth," he told them, "leaves, fruit, chiga (18), etc...."

[137] [252]

18. Chigo grain (Campsiandra comosa), from which the Yaruro apparently extract flour.

The origin of the chiglíre is illustrated on its part by the text reproduced next:

1st version (literal translation)

"Once upon a time, when the Kuma still lived on earth, an old Otomaco pume (19). The Kuma had a little gourd

19. In Yaruro: man or Yaruro.

full of mosquitos (20) and plaga (21) and one day the Otomaco

[137]

20. Diurnal wounding gnats (Similium haemapotum Malloch), in Venezuelan.

21. Nocturnal mosquitoes, in Venezuelan.

asked her: "What is this, grandmother?" "No, son," she answered him, "do not try to uncork it because they are Ijiai's sons. If you uncork it, /12/ the little beasts will eat you." The Otomaco, the old pume, was stubborn and in an inattentive moment of the Kuma uncorked the little receptacle near a river. In an instant he was covered with bites and threw himself into the water. Then Ijiai said to him that for